

So...It's Time To Buy A New Appliance

Appliances today are smarter and more energy efficient than ever before, and we depend on them day in and day out. They cook our food, clean our dishes and laundry, keep our food from spoiling, and cool and heat our homes. They save us both time and energy. But wait a minute, they use energy too!

Consider the real cost

Appiances really have two price tags. One tag is the purchase price on the equipment when you pick it out. The other is paid out month after month, year after year, in the form of your utility bill.

Take a look at the new refrigerator you are thinking about buying. Fifteen years from now it should still be keeping food cold. But at the end of those 15 years, you may find that you spent more operating it than you did buying it! That's why it's important to consider the operating costs as well as the purchase price when you make your buying decisions.



Finding an efficient appliance

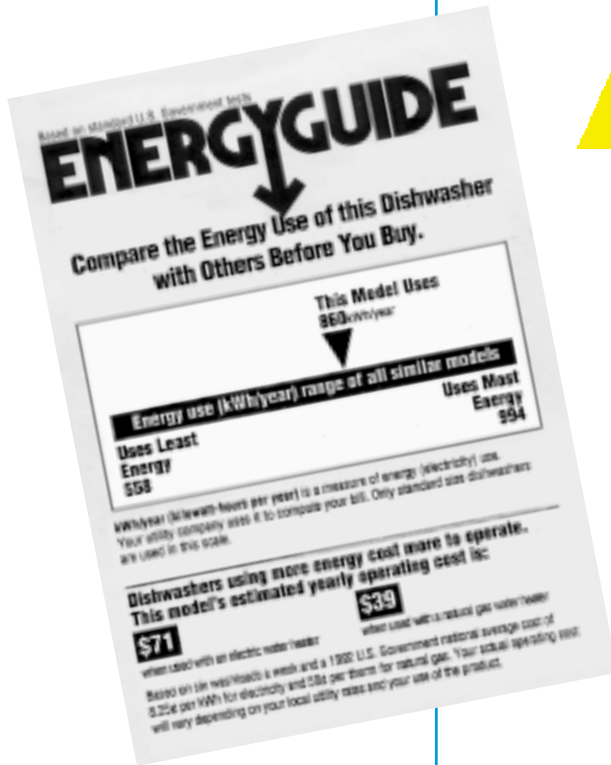
You can shop with confidence, knowing that your major household appliances have to meet either, or both, federal and California standards for minimum operating efficiency. (The standards do not include electronic equipment like televisions and VCRs.) You can, however, purchase appliances that are *better* than the minimum efficiency. Appliances that exceed minimum standards will run more efficiently and provide you with long-term savings on your monthly utility bill. In fact, the additional cost you may pay for an energy efficient appliance is often recovered many times over by the energy savings.

Before you go shopping, consider reading the articles and advertisements in home improvement and decorating magazines to find out about new technology and features. In addition, check out consumer magazines for information on product testing, reliability and repairs.

Energy Guide Labels

– the way to make the right choice

EnergyGuide labels display an appliance's energy efficiency rating, as well as the estimated yearly cost to operate the appliance. This information will help you compare competing brands and models to determine the one that costs less to own and operate over its lifetime. You will find the yellow and black federal *EnergyGuide* labels on refrigerators, freezers, water heaters, dishwashers, clothes washers, room air conditioners, heat pumps, furnaces, central air conditioners, pool heaters, and boilers. The labels come in slightly different formats for different appliances, and some feature a scale indicating how the energy efficiency of that particular model compares to others. Be sure you are comparing appliances that are the same size and have the same features. And to make the wisest choice, remember to consider the **total** cost of the appliance – the purchase price plus yearly operating costs.



*Enjoy the best service
and the longest lifetime
possible from all your
household appliances.*

*The Energy Commission's
"Tips for managing
energy in the house" fact
sheet is full of ideas on
everyday use and
maintenance.*

Energy Star®

- the symbol for energy efficiency

Energy Star®-rated products are among the most energy efficient available in today's marketplace. Buying and using *Energy Star*® products help you save money on utility bills and protect the environment. Look for the *Energy Star*® label on televisions, computers, refrigerators, clothes washers, dishwashers, room air conditioners, home electronics, light bulbs, and more.

If you have access to the Internet, log on to the *Energy Star*® Web Site, located at www.epa.gov/energystar, and search the on-line database for an energy efficient product that meets your needs. Once you choose the model you want, query the Web Site's store locator to find a retailer near you.



What to look for in a new appliance

New appliances come with all sorts of bells and whistles, but consider your needs before you purchase features that you and your family might not need or use. Ask yourself questions like these:

- How often will you and your family use the through-the-door ice maker?
- Will the compact dishwasher you're interested in be big enough, or will you have to run it several times to clean your family's dishes?
- Do you do 17 loads of laundry a week or five?

The same bells and whistles that make an appliance convenient may—or may not—use extra energy. Here are a few suggestions to help you make your decision:

Refrigerators

come with an **EnergyGuide** label, which tells you how much electricity in kilowatt-hours (kWh) a particular model uses in a year. The smaller the number, the less energy the refrigerator uses and the less it will cost you to operate.

- Refrigerators with the freezer on either the bottom or top are the most efficient. In fact, bottom freezer models use approximately 16% less energy than side-by-side models. Top freezer models use about 13% less than a side-by-side.
- Through-the-door icemakers and water dispensers are convenient and reduce the need to open the door, which helps maintain a more constant temperature. However, these convenient items will increase your refrigerator's energy use by 14 to 20%.
- Too large a refrigerator may waste space and energy. One that's too small can mean extra trips to the grocery store. Your best bet is to decide which size fits your needs, then compare the **EnergyGuide** label on each so you can purchase the most energy efficient make and model.
- Refrigerators with anti-sweat heaters consume 5 to 10% more energy. Look for models with an "energy saver" switch that lets you turn down—or off—the heating coils (which prevent condensation).

Ranges and Ovens

do not come with **EnergyGuide** labels. You can, however, purchase an energy efficient model simply by keeping the following in mind:

- Gas ranges and ovens generally cost much less to operate than electric ones.
- Convection ovens use fans and an electric heating element to circulate heated air. This combination allows food to be cooked on all racks, and reduces cooking time, temperature, and energy use.
- Self-cleaning ovens are the most energy efficient for cooking because of added insulation. However, if you use the self-cleaning feature more than once a month, you'll end up using more energy than you'll save.
- Several new types of burners are available for electric cook tops. Solid disk elements and radiant elements are easier to clean, but they take longer to heat up and use more electricity. Halogen or induction elements are more expensive than others, but can be up to 60% more efficient. (Only iron or steel pots and pans work on induction elements.)



William J. Keese,
Chair

Commissioners:

Robert A. Laurie
Michal C. Moore
Robert Pernell
Arthur Rosenfeld

Steve Larson
Executive Director

For more information

contact the

Energy Commission

toll free at

1-800-772-3300

or visit our Web Site:

www.energy.ca.gov/efficiency

Energy Efficiency Division

1516 9th Street, MS-25

Sacramento, CA 95814-5512



One in a series of
Home Energy Guide fact sheets available
from the
Energy Commission.

P400-99-003-FS4

Dishwashers

have an **EnergyGuide** label that estimates how much electricity, in kilowatt-hours (kWh), is needed per year to run the appliance and to heat the water based on the yearly cost of gas or electric water heating. Ratings are based on washing six loads a week using the normal settings.

- Look for features like “energy-saving” and “short-wash” cycles. Using more efficient operating cycles helps you use less water *and* save energy.
- Choose a dishwasher that gives you the option to dry with air rather than heat. Heat-drying uses considerable energy; air-drying uses very little.
- Dishwashers are classified as compact capacity and standard capacity. Compact models use less energy, but they also hold fewer dishes. Having to use a compact dishwasher more often can result in greater energy use.

Clothes dryers

do not have **EnergyGuide** labels. Unlike most other appliances, the energy consumption does not vary significantly from model to model.

- Gas dryers generally cost much less to operate than electric ones.
- Look for a model with a moisture-sensor feature, which automatically turns the dryer off when clothes are dry. Not only will this save energy, it will save wear and tear on your clothes caused by over-drying.
- A cool-down or permanent-press cycle allows fabrics to “relax” without heat at the end of the cycle, which cuts energy usage.

Washers

come with an **EnergyGuide** label that estimates how much electricity, in kilowatt-hours (kWh), is needed per year to run the appliance and to heat the water based on the yearly cost of gas or electric water heating. Ratings are based on washing eight loads per week.

- Front-loading tumble-action washers can cut energy use by up to 70 percent. They can save you more than \$850 in water and detergent over the life of the machine. Best of all, independent studies show they may actually get clothes cleaner.
- Consider purchasing a high-efficiency, low-water-use clothes washer.
- High-speed spin cycles remove more water from fabrics so less energy is needed for drying.

Purchase the right size appliance for your family's needs. Larger isn't automatically better—generally the larger the unit, the more energy it uses, and that higher energy use increases your monthly utility bills.

